

Self-Contained/Interruption-Free Positioning Method and System Thereof

Abstract of the Disclosure

A self-contained/interruption-free earth's surface positioning method and system, carried by a user on the earth's surface, includes an inertial measurement unit, a north
5 finder, a velocity producer, an altitude measurement device, a GPS (Global Positioning System) receiver, a data link, a navigation processor, a wireless communication device, and a display device and map database. Output signals of the inertial measurement unit, the velocity producer, altitude measurement device, the GPS receiver, the data link, and the north finder are processed to obtain highly accurate position measurements of the
10 user. The user's position information can be exchanged with other users through the wireless communication device, and the location and surrounding information can be displayed on the display device by accessing a map database with the user position information.